Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

to adaptation is distinctly myopic, and the treatment of those subjects tends to the dogmatic, not in language but in spirit. This very book seems to the reviewer to show that whatever the deficiencies of the adaptation-selection hypothesis, it still has to its credit a notable balance of reasonableness in comparison with the proposed substitute.—W. F. GANONG.

An elementary text

A new elementary text by BERGEN and CALDWELL[3] attempts to meet the growing demand for practical botany, which means the economic aspects of plants. This demand arises not only from the interest of pupils in the "bread and butter" side of science, but also from what is thought to be the greatest need of that very large proportion of high-school students whose formal education ends with the high school. There is no question that advantage should be taken of interest and need, and the only question is as to whether they are satisfied by a proposed course of study. Moreover, this question can be answered only by experience. Many a public demand voices a real need, and then the change comes to stay; and many another public demand voices an imaginary need, and then the change soon passes into the limbo of "fads."

The book before us has been handicapped in setting the task of meeting a possible public need and at the same time meeting the artificial need of entrance requirements imposed by colleges. As a result, the unifying motive is lacking and the book becomes a mosaic rather than a definite pattern. The field of previous texts is covered, and to this is added the economic phases of plants, which compels a brevity of treatment in many cases that results in obscurity. In spite of the divergent purposes and space limitations, the book is a marked advance in the direction intended.

Some of the noteworthy features are: an introductory general survey of plants in relation to man, and "the plant as a working unit" (pp. 23); elementary forestry (pp. 21); plant breeding (pp. 21); plant industries (pp. 30); weeds (pp. 11); leading families of flowering plants and their uses (pp. 35); and especial emphasis upon plant diseases and methods of control. In a practical botany of 513 pages, one is surprised to find no less than 214 pages devoted to plant groups. However, economic significance has frequently determined the selection of the forms discussed. With the exception of most of the material treated under "The great groups of plants" (pp. 156–370), the text has a decided flavor of elementary agriculture and might well serve as a text in elementary agricultural botany, though such an important topic as seed testing and selecting is conspicuous by the absence of any special treatment. The numerous footnotes and references to literature should prove both useful and stimulating, at least to instructors. The introduction of numerous new and well chosen cuts is refreshing. Unquestionably the book is a valuable addition to elementary texts in botany and should find a wide field of usefulness in the hands of trained instructors.—LEROY H. HARVEY.

---

[3] BERGEN, J. Y., and CALDWELL, O. W., Practical botany. pp. v+545. *figs. 381.* Boston: Ginn & Co., 1911.

MINOR NOTICES

Nature sketches.—The chief scientific value of HANCOCK'S *Nature Sketches*[4] is the large number of accurate and original observations upon insects and other animals in relation to their natural environments. The first chapter contains an unusually clear and simple discussion of problems and theories of evolution. Insect and bird pollination, and the relations of animals to flowers are discussed and beautifully and accurately illustrated, especially in the second chapter, by drawings, photographs, and colored plates of examples from temperate America. The adaptations of insects, birds, and flowers are discussed, and the author appears to be of the opinion that everything is useful. It is unfortunate that the idea of adaptation should be introduced without qualification into a popular work at a time when many botanists and zoologists regard it as doubtful. The chapters on "Animal behavior" and "Ecology" should have had less comprehensive titles. Though somewhat confused with faunistic geography, the first five pages of the chapter on ecology are devoted to a good summary of some of the important facts of genetic ecology. The lists of plant and animal habitats at the end of the book give the habitat preferences of a number of Orthoptera, but contain few elements of progress in ecological classification. The current classification has not been followed.[5] In addition to its scientific value, the book is a good introduction to many aspects of natural history for the lay reader.—V. E. SHELFORD.

Popular manuals.—The nature and purpose of the very interesting *Cambridge manuals of science and literature* have been noticed in this journal.[6] At that time five volumes dealing with plants had been published, and now two additional volumes have appeared: *Links with the past in the plant world*, by A. C. SEWARD (pp. 142); *Life in the sea*, by J. JOHNSTONE (pp. 150). The volumes are sold for one shilling each, and form for the general reader a readable résumé of current scientific knowledge. The titles of the eight chapters of Professor SEWARD'S volume will give a better conception of the contents than does the general title. They are as follows: "Longevity of trees, etc."; "The geographical distribution of plants"; "The geological record"; "Preservation of plants as fossils"; "Ferns, their distribution and antiquity"; "The redwood and mammoth trees of California"; "The Araucaria family";

---

[4] HANCOCK, JOSEPH L., Nature sketches in temperate America. 8vo. xviii+451. *pls. 12. figs. 215.* Chicago: A. C. McClurg & Co. 1911. $2.75.

[5] PEARSE, in Science **34**:37. 1912, is mistaken in this matter.

[6] BOT. GAZ. **52**:234. 1911.